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Steffen Fries

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EXAMINER

WILLIAMS, JEFFERY L

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

This action is in response to the communication filed on 3/7/11.

All objections and rejections not set forth below have been withdrawn.

Claims 11, 14, 15, 17, 20, 21, and 23 are pending.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations of "...a public switched telephone network that is distinct from the packet-oriented data network..." (e.g. claims 11 and 23). The examiner notes that there is no discussion within the applicant's originally filed disclosure of the notion of a packet-oriented data network as "distinct" from a public switched telephone network. Rather, the examiner notes that the applicant's originally filed disclosure explicitly admits to the fact that the claim recitation of a "public switched telephone network" is a reference to packet-oriented data networks, such as a digital ISDN (e.g. see specification, par. 13; see also par. 25). As the applicant clearly shows the recited "public switched telephone network" as capable of transmitting packets (i.e. a packet-oriented data network), the examiner

notes that there appears to be no basis for the applicant's present recitations for a distinction.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11, 14, 15, 17, 20, 21, and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the new (or amended) claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 14, 15, 17, 20, 21, and 23 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1
2 Regarding claims 11 and 23, the examiner points out that they comprise
3 recitations failing to enable a complete and meaningful interpretation of the claims. The
4 examiner notes that the intended use recitations found within the claim preambles (i.e.
5 “A security module for encrypting ... in a packet-oriented data network, and ... in a
6 public switched telephone network that is distinct from the packet-oriented data network
7 ...” [11]; “A method for encrypting ... in a packet-oriented data network, and ... in a
8 public switched telephone network that is distinct from the packet-oriented data network
9 ...” [23]) each suggest that a “public switched telephone network” (admitted by the
10 applicant to be a digital ISDN – e.g. see par. 13) is somehow distinct from a packet-
11 oriented data network. The examiner notes that the meaning of such a recitation is
12 unknown to one of ordinary skill in the art as it is well known that networks, such as
13 digital ISDNs, are in fact packet oriented data networks (e.g. see evidence, Keller, par.
14 16; Schrodi, par. 5). Furthermore, applicants themselves attest to the fact that the
15 recited “*public switched telephone network*” transmits data packets (e.g. specification,
16 par. 25), thus being a “packet-oriented data network”.

17
18 All depending claims are rejected by virtue of dependency.
19
20

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 14, 15, 17, 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over DiSanto et al. (DiSanto), U.S. Patent Publication 2003/0009659 in view of Blom et al. (Blom), "Conversational IP Multimedia Security".

Regarding claim 11, DiSanto discloses:

a protocol processing unit processing messages of the key exchange protocol as well as data packets transported on the packet-oriented network using the encrypted transport protocol with keys for the encrypted transport protocol exchanged using a key exchange protocol,, converting voice signals, created by the one of the first and second telecommunication terminals at which said security module is connected, into data packets for transport via the encrypted transport protocol and converting data packets, arriving at said security module after transport via the encrypted transport protocol, into voice signals (DiSanto, fig. 2b:210,220; par. 31, 42, 43 – Herein DiSanto discloses means for processing key exchange and encrypted data transport procedures [i.e.

1 "protocols"] for the purpose of encrypting and decrypting voice and data
2 communications between telecommunication terminals);

3 *a modem connection unit, used when said security module is connected in a*
4 *connecting line at a second telecommunication terminal, setting up a modem*
5 *connection between the second telecommunication terminal and at least one of the*
6 *gateway and another second telecommunication terminal, with the data packets being*
7 *transported using the encrypted transport protocol, along with messages of the key*
8 *exchange protocol, via the modem connection (DiSanto, fig. 2b:240; fig. 4; par. 33).*

9 *wherein a point-to-point protocol connection is used over the modem connection*
10 *in transporting the data packets using the encrypted transport protocol, as well as*
11 *messages of the key exchange protocol (DiSanto, par. 41, 42 – herein DiSanto*
12 *discloses a procedure for establishing a direct connection between two nodes [i.e.*
13 *“point-to-point protocol connection”].*

14 DiSanto discloses a security module designed to provide encrypted transport to
15 data between terminals within a network. DiSanto, however, does not appear to
16 explicitly recite *wherein the encrypted transport protocol is Secure Real Time Transport*
17 *Protocol.*

18 Blom discloses that applications for securely transmitting voice data through
19 networks, such as disclosed by DiSanto, should employ SRTP (Blom, Abstract). It
20 would have been obvious to one of ordinary skill in the art to employ the teachings of
21 Blom within DiSanto. This would have been obvious because one of ordinary skill in the
22 art would have been motivated by the teachings that such security protocols and

1 methods were designed specifically so as to improve the secure transport of voice and
2 data between communication terminals (Blom, Abstract; section 3).

3
4 Regarding claim 14, the combination enables:
5 *wherein the key exchange protocol is multimedia Internet keying* (Blom,
6 Abstract).

7
8 Regarding claim 15, the combination enables:
9 *wherein for a telephone conversation, messages of the key exchange protocol*
10 *are transported via a session initiation protocol, and wherein said protocol processing*
11 *unit processes the session initiation protocol* (Blom, section 2; section 5).

12
13 Regarding claim 17, the combination discloses that any conventional
14 communications system may be employed (DiSanto, par. 19). While the combination
15 does not appear to explicitly recite an ISDN communications system or the utilization of
16 the B channel of the ISDN system, the examiner notes that the employment of ISDN
17 and the B channel of ISDN were well known and implemented concepts to those of
18 ordinary skill in the art. One of ordinary skill in the art would have been motivated to
19 recognize ISDN and the utilization of communications over the B channel because such
20 system was conventional and its benefits were well recognized.

21
22 Regarding claim 20, the combination enables:

wherein the packet-oriented network is an Internet protocol-based data network, wherein the packet-oriented network is local area network (DiSanto, par. 19), and said modem connection unit sets up the modem connection in accordance with at least one of a V90 and a V92 standard (DiSanto, par. 33).

Regarding claim 23, it comprises essentially similar recitations as claim 11, and it is rejected, at least, for the same reasons as claim 11.

Response to Arguments

Applicant's arguments filed 3/7/11 have been fully considered but they are not persuasive.

Applicant argues or asserts essentially that:

However, this is irrelevant to whether or not the claimed public switched telephone network is distinct from the claimed packet-oriented data network. In other words, just because the public switched telephone network can be an ISDN, it does not

1 follow that the disclosure does not support the position that there are two distinct
2 networks, one being a public switched telephone network and the other being a packet-
3 oriented data network. Fig. 1 of the drawings and the corresponding disclosure clearly
4 indicate that there is both an IP-based LAN and a separate and distinct public TDM
5 telephone network. For example, paragraph [0015] of the specification clearly states
6 "the heterogeneous network shown in Figure 1 on the one hand includes an IP-based
7 LAN (LAN = Local Area Network) as well as a public TDM (TDM = Time Division
8 Multiplexing) telephone network."

9 (Remarks, pg. 6)

10
11 *Examiner responds:*

12 In response, the examiner respectfully notes that the applicant is mistaken.
13 Specifically, the applicant's disclosure of the claimed network is particularly relevant. In,
14 other words, as has been clearly shown by the examiner, the applicant discloses the
15 recited "public switched network" to be a network oriented for transmitting packet data
16 (e.g. see par. 13 – "ISDN", par. 25 – "TDM"). In addition to the applicant's own
17 admission, the examiner respectfully notes that those of ordinary skill in the art have
18 long recognized the utility of public switched telephone networks as networks for
19 transmitting packet data. Furthermore, as applicant should be well aware, the terms
20 "packet-oriented network" and "public switched telephone network" are not mutually
21 exclusive in scope, and thus do not each define "distinct" networks. Thus, the examiner
22 maintains that the claimed "packet-oriented network" and "public switched telephone

1 network" recited as "distinct" is unsupported by the applicant's disclosure, and the
2 applicant appears either unwilling or unable to counter the facts presented by the
3 examiner.

4
5 *Applicant argues or asserts essentially that:*

6 These features are not taught by DiSanto or Blom.

7 The Examiner's statement that applicant is arguing that the claimed networks
8 "use" the recited key exchange protocol and the encrypted transport protocol is not
9 correct. As clearly stated, applicant is asserting that each of the recited key exchange
10 protocol and the encrypted transport protocol are provided via the claimed protocol
11 processing unit and modem connection unit, which are part of the claimed security
12 module.

13 (Remarks, pg. 7)

14
15 *Examiner responds:*

16 In response, the examiner respectfully notes that the examiner has carefully
17 considered and reconsidered the applicant's remarks in an attempt to decipher the
18 argument that the applicant presents for patentability of the claims.

19 The applicant presently contends that the examiner was incorrect for addressing
20 the notion of two distinct networks that "distinctly use" the recited protocols. However,
21 the examiner respectfully reminds the applicant that this very feature was emphasized
22 by the applicant's themselves:

1 “As such, ... because each of the two distinct networks distinctly use the key
2 exchange protocol and the encrypted transport protocol via the claimed protocol
3 processing unit and modem connection unit, respectively. These features are not
4 taught by either DiSanto or Blom”.

5 (*underscoring for emphasis by applicant*, Remarks, pg. 6, 9/8/2010).

6 It is respectfully noted that the applicant appears to unclearly and ambiguously
7 argue the patentability of claimed features. Applicant's arguments do not comply with
8 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he
9 or she thinks the claims present in view of the state of the art disclosed by the
10 references cited or the objections made. Further, they do not show how the
11 amendments avoid such references or objections.

12 However, it is noted that the applicant does make the statement: “*applicant is*
13 *asserting that each of the recited key exchange protocol and the encrypted transport*
14 *protocol are provided via the claimed protocol processing unit and modem connection*
15 *unit, which are part of the claimed security module*”. In view of this statement and
16 previous statements of record by the applicant regarding the recited “protocol
17 processing unit” and “modem connection unit”, the examiner believes that the applicant
18 is arguing that the prior art does not provide both a protocol processing unit and a
19 modem each for the processing of protocols (e.g. “*the claimed protocol processing unit*
20 *and modem connection unit, respectively*”; e.g. see Remarks, pg. 6).

21 In this regard, the examiner respectfully notes that the applicant is mistaken.
22 Specifically, the applicant has mistakenly characterized the applicant's own claims as

1 suggesting that the recited modem is somehow different than a prior art modem.
2 Namely, applicant's remarks of record appear to suggest that the recited "modem
3 connection unit" is disclosed by the applicant as a processor of one of the recited
4 protocols (i.e. *"key exchange protocol and the encrypted transport protocol via the ...*
5 *modem connection unit, respectively"*).

6 However, the examiner reminds the applicant that the disclosed and recited
7 "modem connection unit" is merely a modem used to transmit information according to
8 the prior art manner. It does not process either protocols of the recited key exchange
9 protocol or the encrypted transport protocol. These protocols are processed by the
10 recited "protocol processing unit". Applicant is encouraged to refer back to applicant's
11 own specification (e.g. par. 22, 23).

12 Therefore, the examiner finds the applicant's remarks to be unpersuasive.
13

14 *Applicant argues or asserts essentially that:*

15 Thus, the modem 240 is used merely to comply with the technical requirements
16 of a respective network, but does not provide a technical solution enabling encryption of
17 voice data in a heterogeneous network including a packet-oriented network and a
18 PSTN.

19 (Remarks, pg. 7)
20

21 *Examiner responds:*

1 In response, as similarly explained regarding applicant's previous allegation, the
2 examiner respectfully reminds the applicant that the claim recitations in question
3 essentially pertain to a modem that provides a path for encrypted communication (i.e.
4 transports data according to the design of modem). This feature is clearly shown within
5 the prior art (e.g. DiSanto, fig. 2b:240; fig. 4; par. 33).

6 The examiner respectfully reminds the applicant that the recited modem does
7 **not** perform *encryption of voice data in a heterogeneous network including a packet-*
8 *oriented network and a PSTN*. Rather, the recited modem is merely used to provide a
9 path for transporting any data (e.g. refer to specification, par. 23).

10 Applicant's arguments are unpersuasive, at least, for the reason that they
11 essentially comprises only an allegation that the prior art "*does not provide a technical*
12 *solution enabling encryption of voice data in a heterogeneous network including a*
13 *packet-oriented network and a PSTN*".

14 In response to applicant's argument that the references fail to show certain
15 features of applicant's invention, it is noted that the features upon which applicant relies
16 (i.e., a modem that *provide a technical solution enabling encryption of voice data in a*
17 *heterogeneous network including a packet-oriented network and a PSTN*) are not
18 recited in the rejected claim(s).

19
20
21 *Applicant argues or asserts essentially that:*

1 However, unlike in DiSanto, the modem of the claimed security module enables
2 the data packets from the packet-oriented network to be transported using the
3 encrypted transport protocol, along with messages of the key exchange protocol, via the
4 modem connection. The procedure for establishing a direct connection between two
5 nodes in DiSanto does not anticipate or render obvious this type of connection among
6 terminals of different networks.

7 (Remarks, pg. 8)

8
9 *Examiner responds:*

10 First, the examiner respectfully notes that the applicant's arguments fail to
11 comprise any supporting rationale or evidence showing that the "modem" within the
12 prior art fails to transport data and messages of the key exchange protocol, wherein
13 such data has been encrypted according to the encrypted transport protocol.
14 Essentially, applicant's remarks comprise only an unsupported allegation, and for this
15 reason, at least, they are found to be unpersuasive.

16 The examiner respectfully notes that the applicant's allegation (e.g. "*The*
17 *procedure for establishing a direct connection between two nodes in DiSanto does not*
18 *anticipate or render obvious this type of connection among terminals of different*
19 *networks*") fail to specifically identify and argue for the novelty of any particular claim
20 recitation. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they
21 amount to a general allegation that the claims define a patentable invention without

specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant argues or asserts essentially that:

It is respectfully submitted that the cited prior art does not teach each of the features of claim 23, so that claim 23 patentably distinguishes over the prior art.

(Remarks, pg. 9)

Examiner responds:

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

1 shortened statutory period will expire on the date the advisory action is mailed, and any
2 extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of
3 the advisory action. In no event, however, will the statutory period for reply expire later
4 than SIX MONTHS from the mailing date of this final action.

5 Any inquiry concerning this communication or earlier communications from the
6 examiner should be directed to JEFFERY WILLIAMS whose telephone number is
7 (571)272-7965. The examiner can normally be reached on 8:30-5:00.

8 If attempts to reach the examiner by telephone are unsuccessful, the examiner's
9 supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone
10 number for the organization where this application or proceeding is assigned is (703)
11 872-9306.

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19
20
21 /Jeffery Williams/
22 Examiner, Art Unit 2437
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24 /Emmanuel L. Moise/
25 Supervisory Patent Examiner, Art Unit 2437

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